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## ZOOLOGY.—Adercotryma, a new Recent foraminiferal genus from the Arctic. ALFRED R. LOEBLICH, JR., and HELEN TAPPAN, U. S. National Museum.

In a current restudy of the foraminiferal genotype species, the writers have encountered numerous species that do not agree with the generic descriptions or the genotype species of the genera to which they had been assigned. This is especially true of the Lituolidae. In his excellent work on the Foraminifera of the Gullmar Fjord and the Skagerak, Höglund (1947, p. 132) did much to clarify some of these problems and subdivided the genus Haplophragmoides Cushman. From Haplophragmoides sensu stricto he differentiated two genera, Labrospira Höglund and Ammoscalaria Höglund. However, the writers feel that one species which Höglund treated in this paper, Haplophragmoides glomeratum (Brady) is also sufficiently distinct to warrant separate generic status, based on differences in shell morphology and form and position of aperture. These features are considered to be of fundamental importance in the classification of the Foraminifera.

## Family LITUOLIDAE

Adercotryma Loeblich and Tappan, n. gen.

Genotype (type species): Lituola glomerala Brady, 1878.

Test free, planispiral. subglobular or ovate, elongate in the direction of the axis of coiling, slightly asymmetrical; wall agglutinated; aperture may be lacking in the final chamber, or when present is interio-marginal, forming a low slit or arch near the umbilicus of one side, and closer to the umbilicus than to the peripherv.

Remarks.—Adercotryma differs from Haplophragmoides Cushman, as based on the genotype species, in being somewhat asymmetrical, in being completely involute, rather than slightly evolute, in having the greatest dimension in the axis of coiling, rather than in being somewhat compressed, and in the character of the aperture, which is found near the umbilicus of one side rather than in the plane of coiling at the periphery, or may even be completely lacking in the final chamber.

## Adercotryma glomeratum (Brady) Figs. 1-4

Lituola glomerata Brady, Ann. Mag. Nat. Hist., ser. 5, 1: 433, pl. 20, figs. 1a-c. 1878.

- Haplophragmium glomeratum (Brady) Goës, Kongl. Svenska Vet.-Akad. Handl. 25 (9): 23, pl. 5, figs. 134–139, 1894.
- Haplophragmoides glomeratum (Brady) Cushman, U. S. Nat. Mus. Bull. 71 (1): 104, figs. 158-161, 1910; U. S. Nat. Mus. Bull. 104, pt. 2: 47, pl. 9, fig. 6. 1920; Höglund, Zool. Bidrag Uppsala: 135, pl. 10, figs. 3–4, text fig. 112, 1947; Cushman, Cushman Lab. Foram. Res. Spec. Publ. 23: 28, pl. 2, fig. 16. 1948.

Test free, subglobular to slightly ovate, planispiral but somewhat asymmetrical, with about two whorls present, greatest dimension in the axis of coiling, periphery broadly rounded; chambers few in number, only the four of the final whorl visible, very broad and low, slightly inflated, somewhat wedge-shaped with the narrower portion on the side with the aperture; sutures distinct, rather straight, slightly constricted; wall rather coarsely arenaceous, with considerable cement between the grains; aperture may be indistinct or lacking, or form a short slit or low arch at the inner margin of the final chamber, about one-half to two-thirds the distance from the periphery to the umbilicus, on the narrower side of the test.

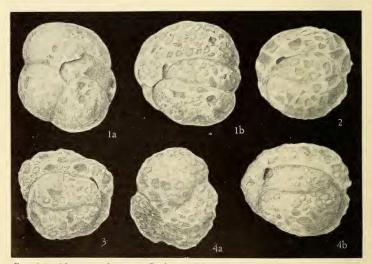
Remarks.—Brady (1878, p. 433) in describing this species states, "Aperture at the inner margin of the terminal chamber, near the exterior of the corresponding segment of the previous convolution, simple, often obscure." Cushman (1948, p. 28) states that the aperture is "a short slit at the base of the chamber, often obscured by sand grains." It remained for Höglund (1947, p. 135, pl. 10, fig. 4) to clearly demonstrate the position of this aperture. He found the aperture to be "interio-marginal, forming a short slit at the margin of the last chamber, near the narrow end of the oviform test, most frequently indistinct or even lacking." In any large series of specimens, apertures are occasionally seen. These are of two types, either a low arch about halfway between the periphery and the umbilicus (Figs. 2, 3, 4b) or forming a slit that extends along the inner margin of the final chamber to the umbilicus (Fig. 1b). Höglund suggested that specimens lacking an aperture might be in a growth stage in which it had not yet been developed. It is possible that

different stages of growth may account for the two variations of apertures here mentioned.

Types and occurrence.—Figured hypotypes (USNM P. 829a–c) and unfigured hypotypes (USNM P. 830) from mud and sand bottom off the south end of Humboldt Glacier, northwest Greenland at a depth of 110 fathoms; collected by Capt. Robert A. Bartlett. Figured hypotype (USMN P. 831) and unfigured hypotypes (USNM P. 832) at a depth of 50 to 57 fathoms, off Clavering Island, northeast Greenland; collected by Capt. Robert A. Bartlett. This species has been widely recorded in both the Atlantic and Pacific Oceans.

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FIGS. 1-4.—Aderostryma glomeratum (Brady): 1a, Side view of hypotype (USNM P. 831) showing four chambers of final whorl, and aperture extending into the umbilical area; 1b, edge view of same showing test slightly elongated along axis of coiling, somewhat wedge-shaped chambers and slitlike aperture; 2, edge view of hypotype (USNM P. 829a) showing low archike aperture; 3, edge view of hypotype (USNM P. 829b) showing short slitlike aperture; 4a, side view of hypotype (USNM P. 829c); 4b, edge view of same showing low arched aperture. Illustrations are shaded camera-lucida drawings by Sally D. Lee, scientific illustrator, Smithsonian Institution. All ×150.